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## New Radiocarbon Dates from the Sanders Site (41LR2), Lamar County, Texas

Timothy K. Perttula

*Center for Regional Heritage Research, Stephen F. Austin State University, tkp4747@aol.com*

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*Timothy K. Perttula*

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## Introduction

Recent archaeological investigations at the West Mound at the Sanders site (41LR2), on the Red River in Lamar County, Texas (Figure 1), disclosed substantial archaeological deposits associated with a burned clay floor to an ancestral Caddo structure in the mound (Perttula et al. 2017). A significant part of the archaeological deposit were unburned animal bones of turtle, deer, and bison, along with Middle Caddo period, Sanders phase, fine and utility ware ceramic sherds; Sanders is one of 26 known Caddo sites in East Texas with bison bones and/or tools (Perttula 2016:Figure 1). In this article, I discuss the results of the radiocarbon dating of two samples of animal bone—deer and bison—from the West Mound at the Sanders site.

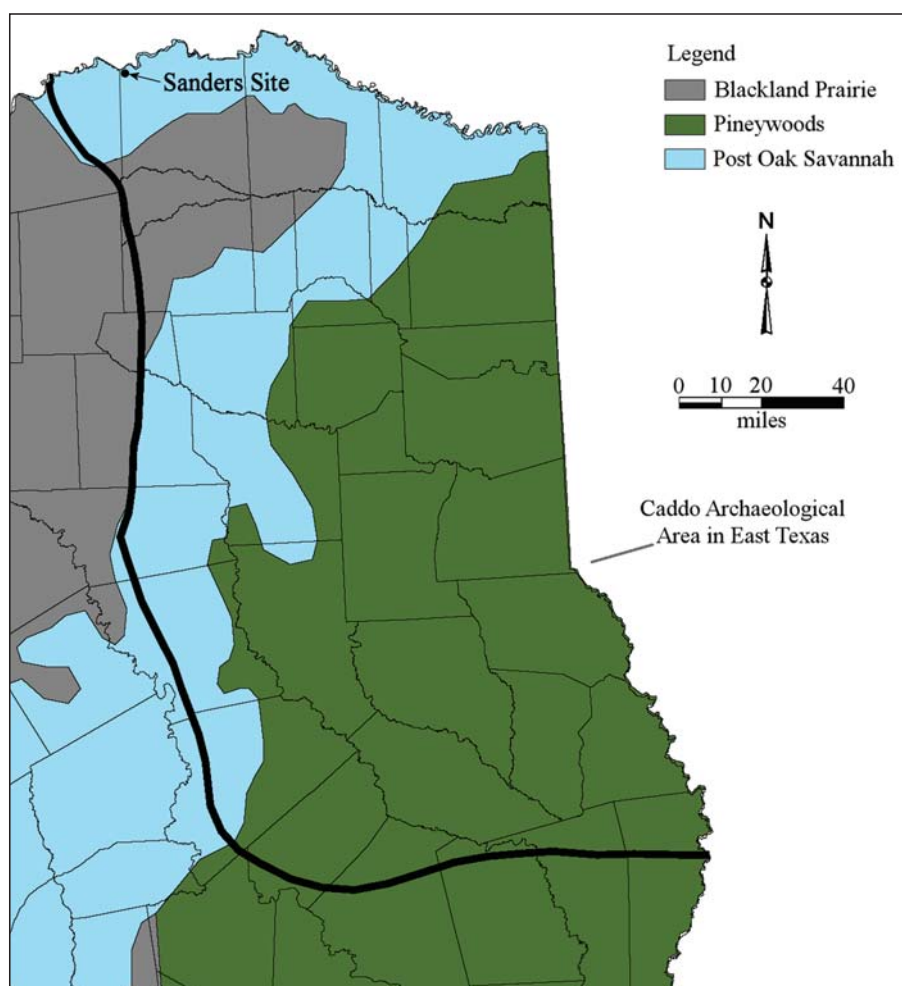


Figure 1. The location of the Sanders site in East Texas. Map prepared by Lance Trask.

### New Radiocarbon Dates

The results of the radiocarbon dating of deer and animal bone from West Mound deposits at the Sanders site are provided in Table 1. At one sigma, the conventional ages of the two samples range from 804-750 years B.P. (A.D. 1146-1200) and 774-702 years B.P. (A.D. 1176-1248). The calibrated age ranges of the bone samples, at 2 sigma (95 percent probability), range from A.D. 1217-1277 to A.D. 1223-1289.

**Table 1. New Radiocarbon dates from the West Mound at the Sanders site (41LR2).**

Laboratory No.	Sample	Conventional Age (B.P.)	Calibrated Age 2 sigma*
D-AMS 017189	bison bone	777 $\pm$ 27	A.D. 1217-127
D-AMS 017190	deer bone	738 $\pm$ 36	A.D. 1223-1289

\*from Reimer et al. 2013

The calibrated age ranges of the two bone dates from the West Mound fall squarely in the Middle Caddo period (ca. A.D. 1200-1400) and the Sanders phase, although Sanders phase sites are not well-dated at the present time. The mean calibrated age range of the two samples is A.D. 1220-1283.

### Summary and Conclusions

Radiocarbon dates on bison and deer bone from the West Mound at the Sanders site have a mean calibrated age range of A.D. 1220-1283, indicating that the West Mound was used by ancestral Caddo peoples in the Sanders phase of the Middle Caddo period. In East Texas, the majority of the Caddo sites with bison remains and/or tools date after A.D. 1430, but the Middle Caddo period occupation at the Sanders site has both bison remains and bison scapula hoes, the latter in funerary contexts in the East Mound (Krieger 1946:183). The dated bison bone from the West Mound confirms that this feature was constructed in the Middle Caddo period, during a climatic minima (the Wolf Minima) whose midpoint dates to ca. A.D. 1250 (Perttula 2016:29).

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